Sea level measurement gauge at Male in the Maldives in the Indian Ocean. Sea level rise is of particular concern for inhabitants of low-lying island nations. Sea level measurements are also of special value in estimating sea level rise rates. Historically, tide gauges have been our only source of information about sea level rise, but in recent years satellite altimeters have given us an exciting new tool to apply to this problem. (Photograph courtesy University of Hawaii Sea Level Center.)

